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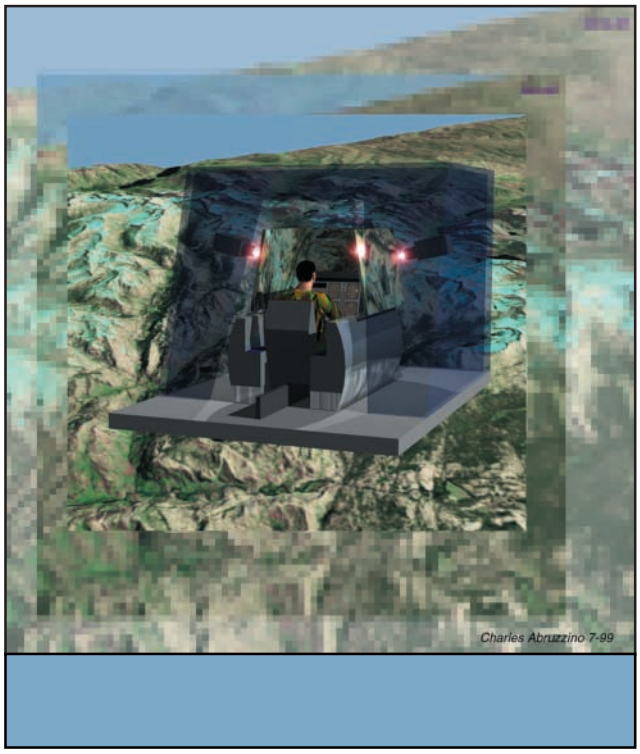
Science and Technology for Tomorrow's Aerospace Forces

Success Story

STATE-OF-THE-ART VISUAL DISPLAY SYSTEM DEVELOPED FOR SIMULATION-BASED RESEARCH AND DEVELOPMENT



The Infinity Cube™, a state-of-the-art, color, wide field-of-view visual display system, provides a continuous vertical field-of-view that allows a real world feel, giving out-the-window objects correct size, altitude, and visual cues. Its air-to-ground orientation complements other resources supporting the flying simulations that are the core components of simulation-based research and development.

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Accomplishment

The Air Vehicles Directorate, Control Simulation and Assessment Branch, recently completed the installation of the one-of-a-kind Infinity Cube™. The cube's wide field-of-view provides a visual display system for flight simulation, research, and development. The Infinity Cube's™ display system surrounds the "pilot" with four Pancake Window™ displays to the front, top, left, and right.

The directorate will use the Infinity Cube™ to support research for the Joint Strike Fighter and unmanned aerial vehicles. However, the cube has potential to support broader-based research including weapon systems analysis, flying qualities, and networked "war gaming" activities. The Infinity Cube™ is a unique research tool that the directorate and other organizations will use to support mission simulation for years to come.

Background

Electro Visual Engineering (EVE) developed the Infinity Cube™ as a prototype display system for use as a training device. The Control Simulation and Assessment Branch perceived the potential for simulation-based research and development and arranged to acquire the system. They contracted with EVE to upgrade the system to better suit directorate requirements. EVE increased the cube's image generator and projector resolutions, as well as doubled the channel brightness.

Air Vehicles
Support to the Warfighter

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTT, (800) 203-6451 and you will be directed to the appropriate Laboratory expert. (01-VA-01)